"May the course be with you": Sociology students' socio-cultural position affects their learning through perceived course relevance

Most sociology teachers hope for a classroom full of motivated students. However, the daily reality often includes disengaged students lounging in back row seats, who are likely to find the taught concepts difficult to grasp. Several recent *Teaching Sociology* articles have expressed concern about the discipline's lack of popularity. Sweet (2016) for instance showed that sociology and psychology majors held a comparable position in 1970, but by 2011 psychology graduates had outnumbered sociology graduates three to one. He underlined the importance of relating sociology to students' interests, since 'one explanation for why students select the major is that it fits with the biographies that they have' (8). Similarly, Zipp (2012) estimated that of the vast number of students who take introductory sociology each year, only 6.4-8.5 percent choose to major in sociology and less than 2 percent are awarded a sociology undergraduate degree. He too suggested that the 'majority of our students are most interested in the ways in which what we teach speaks to their lives and the world around them' (308).

To raise the discipline's popularity, students should thus understand 'what's in it for them'. Although this 'course relevance' may be academic or career-related (e.g. relating content to exam questions or job interviews), most often it is understood as the linkage of courses to students' personal lives (Frymier and Shulman 1995; Muddiman and Frymier 2009). In the current context of marketized and managerial education, with students resembling consumers, teachers increasingly adopt such a 'pedagogy of biography' (McLean and Abbas 2009). However, by using certain course *contents*, teachers may inadvertently focus on some socio-cultural subgroups' biographies, thus risking the exclusion of others. By contrast, the integration of a 'relevant' *medium* into the classroom was found to resonate with most students (Jones and Cuthrell 2011). Such a medium might especially help educationally 'disadvantaged'

students – those with parents of low cultural status, those with immigrant backgrounds, and masculine students (OECD 2010) - to grasp the course's relevance.

This study hence has two main goals: testing 1) whether students perceive the sociology course as (ir)relevant if its *content* (mis)matches their socio-cultural position, and whether this relevance in turn affects their course satisfaction and/or achievement, and 2) whether a relevant course *medium* lessens the learning gap between 'advantaged' and 'disadvantaged' students.

LITERATURE REVIEW

Course Relevance: A Key Predictor of Student Learning

Frymier and Shulman (1995:42–43) defined 'course relevance' as 'a student's perception of whether the course instruction/content satisfies personal needs, personal goals, and/or career goals'. They discovered that increased relevance boosts undergraduate students' course motivation. Many other studies have found similar positive effects on motivation, conditional reasoning, reduced text anxiety, on-task behavior and empowerment (Finney and Pyke 2008).

Such beneficial effects explain why, in Wagenaar's (2004) study, 301 sociologists rated 'applications to students' lives' as a key element of the introductory sociology course. McKinney and Naseri (2011) complemented this teacher perspective with a longitudinal study among sociology majors, who also most often mentioned 'applicability of sociology and "real-world" examples' when asked what helps them feel engaged or passionate about the discipline.

Since sociology teachers and students agree on the importance of relevant teaching, it is logical that multiple articles which bridge the gap between course materials and students' lives have appeared in *Teaching Sociology*. Rafalovich's (2006) students for instance performed a

real-world breaching experiment, Eisen's (2012) students created photographs of everyday situations to represent sociological topics, and Noy (2014) integrated the popular website PostSecret.com into her sociology course. Such teacher efforts seem to be paying off: Howard and Zoeller's (2007) large-scale sample of introductory sociology students gave an average rating of 3.63/5 for the item 'the course improved my ability to apply what I learn in college to issues and problems I face in daily life'.

The Socio-cultural Underpinnings of Course Relevance

Despite its promising learning effects, 'relevant' teaching may not fit equally with all students. Classroom instruction interacts with both students' non-school experiences (at home, at work, during leisure activities, etc.) and their socio-cultural characteristics, such as their ethnicity, socio-economic status and gender (Yair 2000). When linking the sociology course to student biographies, teachers should thus always consider exactly whose biographies are being referred to. This explains why two experimental studies failed to manipulate course relevance for entire student groups at once. Frymier and Houser (1998) trained a 'guest lecturer' to deliver either a high-relevance (familiar, local examples) or a low-relevance (unfamiliar, abstract examples) version of a 'public speaking' university lecture but found no differences in motivation between the groups. A follow-up experiment by Behrens (1999, discussed in Frymier (2002)) employed three relevance strategies - linking course content to students' present situation, past experiences, or future – yet still discovered no significant learning differences compared to a low-relevance condition.

The radical diversification of students in higher education over recent decades has further problematized the search for 'one-size-fits-all' relevant teaching (Luna and Winters 2017). As

an alternative, Gay (2013:49–50) proposed *culturally responsive* teaching: using 'the knowledge, prior experiences, frames of reference, and performance styles of ... diverse students to make learning encounters more relevant'. Aronson and Laughter (2016) systematically reviewed such 'culturally relevant' studies. Across various content areas - including mathematics, history/social studies and English – gains were reported in test scores as well as affective measures like students' motivation and self-perceived academic capability. Nevertheless, such studies mostly still interpret 'culturally relevant' teaching as helpful to the entire student group. Rarely is attention given to how its effects vary *within* the classroom.

Two Types of Course Relevance: Content versus Medium

Many studies into 'course relevance' have an additional blind spot: they muddle the effects of interventions related to a course's *content* versus its *medium*, making it difficult to pinpoint the cause of learning effects. Whitley (2013) for instance took up two youth-related sociological themes (relevant content) weekly, each with a lecture with interactive features like short videos, music or website links (relevant medium). Both relevance types can be effective: 20 percent of Muddiman and Frymier's (2009) students suggested everyday *content* – like beer, fast food or their lives as college students - to make courses relevant, while 19 percent mentioned popular *media* like movies, TV and YouTube videos. Obviously, the types interact: a music video may for instance appeal to students due to their interest in the music as well as the 'flashy' visuals.

Despite this close link between relevant course contents and media, their underlying socio-cultural mechanisms likely differ substantially. As discussed above, course contents may be relevant to some student subgroups yet leave others indifferent, hence creating mechanisms of educational in- and exclusion. By contrast, the use of 'popular' course media resonates with

most students because they share one vital characteristic: their age. This generation whose 'coming of age experiences and identity development are, more than any other time in history, mediated by a slew of multimodal texts' is likely to perceive a course as more relevant if it uses relevant media (Redmond 2015:10). Teachers may for instance clarify sociological concepts with YouTube clips: passively, by discussing them during lectures, or actively, by asking students to upload their own videos (Andrist et al. 2014).

The positive learning effects of YouTube have been proven across course subjects (Jones and Cuthrell 2011). These last decades, *Teaching Sociology* has also published more than 30 'teaching-with-film' articles. Such teaching boosted not just students' interest and sociological imagination, but also their critical analysis and observational skills. In addition, it reduced stereotypical thinking and theory-related anxiety. About half of Howard and Zoeller's (2007) student sample said that their introductory sociology course (very) often included videos. The 'video-shy' other half of the instructors risks giving new student cohorts the impression that sociology is irrelevant to their media-permeated daily lives (Andrist et al. 2014).

The 'Equalizing' Potential of Medium-related Course Relevance[1]

Although the use of relevant course media is thus likely beneficial for most students, some are probably in greater need of that 'learning boost'. Students from 'advantaged' socio-cultural positions may already experience a match between the sociology course and their personal interests, regardless of whether a relevant medium is used, whereas 'disadvantaged' students may need that medium to grasp the course's relevance (Kraaykamp and Notten 2016). Ractham

[1] This section is largely based on [author's name withheld] (2017).

and Firpo (2011:3) apply the 'Long Tail' metaphor to the classroom: 20 percent of the students might be willing to participate in class anyway, but relevant media break down the participation barriers so that the remaining 80 percent also grasp the course's relevance. Indeed, Yair (2000:261) finds that during relevant instruction, 'students who are at risk may even be more engaged than their less troubled peers. ... Thus, the manipulation of instruction may offset circumstances of birth and non-school lifestyles'. Luna and Winters (2017) observed a similar dynamic: compared to a traditional lecture, a 'blended learning' sociology course produced gains in knowledge and critical thinking for students of color, but made no difference to 'white' students' learning.

The current study tests this assumption that 'disadvantaged' students' learning might be especially furthered by the integration of YouTube into the sociology classroom. YouTube is chosen because as a free user-sharing site it is readily accessible for popular use (Andrist et al. 2014). Three sources of educational '(dis)advantage' are simultaneously examined: students' gender, immigrant background and parental cultural status. According to PISA data (OECD 2010), higher reading scores are usually achieved by girls, students without an immigrant background, and those of higher socio-cultural status. Applied to the introductory sociology course, Kwenda (2011) also discussed the disadvantage of male and ethnic minority students. Male students' poorer performance has been ascribed to the 'feminization' of education (Watson, Kehler, and Martino 2010). Ethnic minority students' disadvantage has been attributed to differential quality of schooling and/or hereditary influences, but usually also reflects the different socio-economic resources of households with and without immigrant backgrounds (Azzolini and Barone 2013; Kwenda 2011). This influence of social class – and especially cultural capital – to students' educational success has been extensively proven since Bourdieu formulated his cultural reproduction theory (Kraaykamp and Notten 2016).

CURRENT STUDY AND HYPOTHESES

The study investigates the socio-cultural antecedents of students' relevance perceptions in introductory sociology courses at three Belgian universities. This setting fits with the call for more research in postsecondary educational institutions outside of the US (Brint 2013). Firstly, the study tests whether a (mis)match between course examples' gendered *content* and students' gender (de)stimulates their perceived relevance. Why gender? Although most studies into culturally responsive teaching have focused on students' race/ethnicity, other socio-cultural divides can be studied (Gay 2013). Apart from race, the most prominent intergroup relations in day-to-day societies are class and gender (Jackman 1994:97). The population of Belgian university students consists of 44 percent male and 56 percent female students, while only 15 percent have at least one parent born outside of Belgium and 75 percent have at least one parent with a higher education degree (Wartenbergh et al. 2009)[2]. In this 'white', upper-class setting, gender creates the clearest socio-cultural division. Finally, the 'equalizing' potential of the relevant *medium* of YouTube is tested. Six hypotheses emerge from the literature review:

- H1: When students perceive a course as more relevant, this increases their satisfaction with that course.
- H2: Students' course satisfaction positively affects their course achievement.
- H3: A (mis)match between students' gender and gendered course examples (de)stimulates their relevance perceptions.
- H4: The use of YouTube course examples – rather than verbal anecdotal examples – reduces the learning gap due to students' gender.
- H5: The use of YouTube course examples – rather than verbal anecdotal examples – reduces the learning gap due to students' immigrant background.
- H6: The use of YouTube course examples – rather than verbal anecdotal examples – reduces the learning gap due to students' parental cultural status.

[2] These numbers refer to higher education in Flanders, the Dutch-speaking part of Belgium and the current study's setting (all participating universities are situated in Flanders).

METHOD

Sample

The sample consisted of 1325 students enrolled in five introductory sociology courses at three Belgian universities. Relevant teaching is crucial at this early stage because if students become interested, majoring in sociology is still a viable option (Sweet 2016). The participating student groups ranged from small (67 students) to large (574 students), with the remaining three groups numbering about 300 students. The sample reflects the Belgian university student population regarding sex (45 percent male - 55 percent female), immigrant background (20 percent have at least one parent born outside of Western Europe) and parental education (79 percent have at least one parent with a higher education degree). The participants' mean age is 19.2. About 16 percent were sociology and political science majors[3], the rest were mostly majors in theoretical economics (19 percent), management/business economics (23 percent), communication science (21 percent), law/criminology (9 percent), and psychology/pedagogy (8 percent).

Procedure

Analytically distinguishing the effects of medium- and content-related relevance requires two orthogonal experimental manipulations. A renowned sociologist was asked to give a lecture about one of the discipline's founding fathers to a student audience and a few video cameras. Durkheim was chosen because his ideas are abstract enough to make undergraduate students

[3] Two of the sample's three universities do not separate sociology from political science in the first year.

doubt the relevance to their lives. This 45-50-minute video lecture was then edited into four versions. Most aspects –the topic, length, teaching style, instructor characteristics, etc.- remained the same in all versions, as the same camera shots and audio were used. The only difference were the examples given to explain Durkheim's insights.

Content-related relevance was manipulated through the examples' fit with students' gender. The instructor recorded two versions of the examples, drawing consistently from the domain of soccer versus fashion. The lecture started with the concept of organic solidarity, explained via an interview with either a make-up artist or a soccer coach. Mechanic solidarity was then clarified with a Japanese fashion photo shoot vs. American soccer fan culture. Subsequently, Durkheim's influence on Merton was briefly mentioned. Merton's four function types were related to the impact of fashion on women's physical self-image vs. the unscrupulous working conditions at the Qatar 2022 World Cup site. Finally, Durkheim's notion of 'social facts' was explicated through the dress code at the Cannes Film Festival vs. the rules of playing soccer. The contrast was based on abundant research about the stereotyping of soccer as a 'masculine' and fashion as a 'feminine' pursuit (Parkins 2010). Such stereotypes are linked to cultural notions of femininity/masculinity, rather than biological sex (Colley et al. 1996).

Secondly, to manipulate *medium*-related relevance, a visual version of the 'masculine' and 'feminine' examples was created by integrating short YouTube clips into the video lecture and asking the instructor to briefly relate these to the course[4]. In these 'visual' versions, the instructor's verbal anecdotes about fashion vs. football were thus replaced by YouTube clips with similar contents (e.g. showing a football match instead of talking about it).

The experiment took place during one two-hour introductory sociology class at the start of the academic year, in October 2015. At each university, the student groups were randomly

[4] This video usage meets the 'fair use' requirements, plus permission was requested from the copyright owners.

divided into the four experimental conditions: verbal-feminine (380 students), visual-feminine (230 students), verbal-masculine (328 students) and visual-masculine (384 students). This randomized design is a more powerful causal test of the hypotheses than the non-equivalent comparison groups design – only used in 8 percent of *Teaching Sociology* articles and notes – since it controls for differences in students' pre-existing course knowledge and (dis)interest (Sweet and Cardwell 2016). When arriving at their assigned classroom, the students received a brief introduction, explaining that the lecture was part of a study about 'relating abstract course content to students' interests' and that they would afterwards evaluate it with a survey. Both to grab their attention and to make it feel like a 'normal class situation', the lecture was stressed to be part of the regular exam material[5]. Subsequently, it was shown[6]. Immediately afterwards, the students completed a survey. During the next class, they were debriefed.

This study protocol was approved by the institutional review board (IRB) of the researcher's university. As Durkheim is part of their regular course material, all students who came to class watched the lecture, although they were free to leave at any time. The survey starts with a passive informed consent form which stresses the study's anonymous nature, and provides the researcher's and IRB's contact details. Students were informed that they could refuse to complete the survey or certain questions without any consequences. Active informed consent was not possible at this stage because disclosure of the study design could bias the results (e.g. students who had just viewed the 'verbal' lecture might be disappointed that they had not been assigned to the 'visual' version). Long-term negative learning effects were avoided by

[5] Although teaching assistants were briefed about this important remark, in one video version of one class the assistant said that 'exam-related content would be repeated later'. Although Durkheim is really part of the exam material, instructors may decide to repeat some of the video lecture's contents to make sure that students have understood. Student remarks during a post-experiment focus group indicated the negative side-effects of this different introduction, e.g. students leaving or chatting during the lecture. To safeguard the comparison of the experimental conditions, the group was dropped from the analyses. N=1325 is the remaining sample. This also explains the smaller group size of the 'visual-feminine examples' condition.

[6] A fourth Flemish university agreed to participate with one student group. However, due to technical difficulties (asynchronous audio/video, blurred images), the lecture could not be properly shown to this group.

uploading all lecture versions to the online learning platform. As the versions were standardized except for the used examples, watching those suffices to get the best instruction.

Measures

The study's independent variables are the two experimental manipulations. The *course examples' medium* is coded as '0 = verbal / 1 = visual examples', and the *course examples' content* is coded as '0 = stereotypically 'masculine' / 1 = stereotypically 'feminine''.

For content-related relevance, the moderator is students' *gender identity*. 'Gender' points to the imposition on a sexed body of socially constructed ideas about appropriate roles for women and men. Scott (1986) defined one of its subsets as 'the subjective, self-ascribed identity of real women and men'. This study focuses on that self-ascribed *gender identity*. Students were asked to indicate how 'masculine' and 'feminine' they feel on two 10-point scales. Although this avoids a binary opposition - students could indicate feeling both 'masculine' and 'feminine', one of both, or neither - in practice only a tiny minority used this opportunity, as evident in the scales' negative correlation (-0.94, $p < .001$). Thus, the variable *'feminine' gender identity* was created by subtracting the 'masculinity' from the 'femininity' scores: value 10 means feeling very 'feminine' and not 'masculine' at all, value -10 means the opposite, and value 0 means feeling equally 'masculine' and 'feminine' (Dierckx, Motmans, and Meier 2013).

For medium-related relevance, the moderators are three sources of educational (dis)advantage: students' *gender identity* (see above), *immigrant background* and *parental cultural status*. The latter is based on the occupations of students' parents, recoded as one of the fifty-five broad categories devised by de Graaf and Kalmijn (2001). Each category has a numeric value depending on its members' average education, and *parental cultural status*

(ranging from -1.26 to 2.57) represents the average of both parents' values. Finally, students score value 1 on *immigrant background* if at least one of their parents was born outside of Western Europe. This measure is inspired by the PISA concept of 'second-generation immigrants' (OECD 2010:14). The focus on parents' place of birth also fits the experiment's Belgian context, where the adjective 'allochthonous' is used to designate persons residing in Belgium - regardless of whether they possess Belgian nationality – with at least one (grand)parent born outside of Western Europe. This derogatory term and its associated disadvantaged social position create a strong oppositional identity not unlike the situation of blacks in the US (Van Houtte and Stevens 2009).

The first mediator is students' *perceived relevance* of the examples, assessed with the item 'to what extent do the examples, used by the guest lecturer during this lecture, relate to your day-to-day life (personal interests, leisure activities…)?' (0 = 'not at all' to 10 = 'totally').

The study's second mediator, students' *course satisfaction*, is based on student self-reports about whether: (1) they *felt competent* in dealing with course tasks, such as memorization and understanding (items one to seven in Appendix A, inspired by Choi (2005) and Wood and Locke (1987)), (2) they experienced the *classroom climate* as positive (items eight to 12, based on Mazer, Murphy, and Simonds (2007)) and (3) the lecture *triggered their interest* (items 13-16, based on Linnenbrink-Garcia et al. (2010)). An exploratory iterated principal factor analysis reflected one factor of *course satisfaction*, which explains 85 percent of the variability. All 'course competence' and 'triggered interest' plus two 'classroom climate' items were retained. This 13-item additive index ranges from 13 to 51, and has a Cronbach's alpha of .88.

The dependent variable is *course achievement,* inspired by Van Auken's (2013:210) call for 'further study of whether ... increased engagement leads to improvement in student learning outcomes'. Six multiple-choice questions about the lecture (see Appendix B) tested whether

students with a higher course satisfaction also scored higher grades. Students receive no points per wrong answer and one point per correct answer, so *course achievement* ranges from 0 to 6.

Finally, one control variable was added: students' *maintained interest* – their pre-existing dispositions towards the sociology course – as measured by eight items (e.g. 'I am not very enthusiastic about what we learn during sociology') (Linnenbrink-Garcia et al. 2010). The exploratory iterated principal factor analysis unveiled one factor. All items were summed and the resulting variable *maintained interest* - with a Cronbach's alpha of .90 - was mean-centered (range -17.17 to 10.83).

A moderated serial mediation model was estimated with the CALIS procedure of the statistical software SAS. The full information maximum likelihood (FIML) method was used to deal with incomplete observations. Unless stated otherwise, significance implies $p \leq .05$.

RESULTS

Perceived Relevance Affects Students' Course Satisfaction and, in turn, their Achievement

Table 1 summarizes the model results. First and foremost, hypothesis one is confirmed: every increase in perceived relevance produces a significant 0.74 increase in students' course satisfaction. The second hypothesis is also supported: a higher course satisfaction improves students' course achievement (0.06, $p < .001$). This effect seems small, yet 'course satisfaction' has a range of 38, so that students who are least satisfied score an impressive 2.28 (0.06*38) points less on the six multiple choice questions than those most satisfied with the course.

Surprisingly, however, perceived course relevance not only exerts a positive indirect effect on students' achievement via their course satisfaction, but also slightly decreases their

achievement directly (-0.04, $p < .05$). Perhaps relevant content triggers students' attention – which increases their course satisfaction and, in turn, their achievement – but also keeps them 'within their comfort zone' rather than challenging them to think critically, hence decreasing their achievement? Further research should test this post-hoc explanation. **Table 1 about here**

Content-related Course Relevance: Who Perceives Which Topics as Relevant?

The third hypothesis - *(mis)matching students' gender with the gendered course examples (de)stimulates their relevance perceptions* - is clearly confirmed by table 1's significant interaction of the example content with students' gender identity on perceived course relevance. Keeping all other model variables constant, each increase in students' 'masculinity' (negative scores on 'feminine' gender identity) strengthens their perceived course relevance with 0.12 units, *if* 'masculine' course examples are used. With 'feminine' examples, an increase in students' 'feminine' gender identity boosts the course's relevance by 0.14 units. Moreover, a *mis*match of the examples with students' gender *reduces* the course relevance: 'masculine' examples are rated 2.4 points less relevant (on the 10-point scale) by students who feel totally 'feminine' (value 10 on gender identity) than by those who feel totally 'masculine' (value -10). Figure 1 shows the interaction's positive and negative sides. **Figure 1 near here**

Medium-related Course Relevance: An 'Equalizing' Force?

Hypotheses four, five and six respectively expect that *the use of YouTube course examples – rather than verbal anecdotal examples – reduces the learning gap due to students' gender,*

immigrant background and parental cultural status. Table 1's last three rows display the interactions of students' (dis)advantaged socio-cultural position with the visual (vs. verbal) course examples. Only four of these nine interactions are significant, but these are in line with hypotheses four to six, as can be seen in figure 2[7]. **Figure 2 about here**

Firstly, figure 2's upper left-hand panel visualizes the interaction between students' parental cultural status and the examples' medium on *perceived course relevance*. With verbal examples, students of higher parental cultural status perceive the course as somewhat more relevant (0.23, $p = .06$). YouTube examples level the playing field: parental cultural status no longer significantly affects students' relevance perceptions (-0.20, $p > .10$).

Secondly, figure 2's upper right-hand panel shows the significant interaction between students' immigrant background and the examples' medium on *course satisfaction*. Interestingly, the satisfaction of students with and without immigrant backgrounds does not differ if verbal examples are given (-0.83, $p = 0.29$). With YouTube examples, however, students with immigrant backgrounds are slightly more satisfied with the course (1.61, $p = .07$).

Finally, figure 2's lower left- and right-hand panels illustrate the significant interactions of, respectively, students' parental cultural status and gender identity with the examples' medium on their *course achievement*. With verbal examples, each increase in parental cultural status significantly heightens students score on the multiple-choice questions (0.24, $p < 0.01$), as does each increase in their 'feminine' gender identity (0.02, $p = 0.01$). Explaining the same course materials with YouTube clips clearly robs both effects of their significance (parental cultural status: -0.02, $p = 0.84$; 'feminine' gender identity: -0.00, $p = 0.94$).

[7] To further explore table 1's significant interactions, Hayes's (2013) PROCESS macro - 'model 1' was used to estimate the effects in figure 1 and 2. The interaction's socio-cultural variable (parental cultural status, immigrant background or gender) was used as the independent variable, its experimental manipulation (course content or medium) as the moderator, its outcome (perceived relevance, course satisfaction or achievement) as the dependent variable, and the remaining socio-cultural variables and experimental manipulation as controls.

DISCUSSION

This study shows that students' perception of the sociology course as relevant is not just a crucial predictor of course satisfaction and achievement, but is itself also dependent on students' socio-cultural position. A distinction was made between mechanisms underlying *content*- and *medium*-related course relevance. Content-related relevance was expected to create both in- and exclusionary learning effects, depending on the (mis)match of course contents with students' socio-cultural position. Medium-related course relevance, by contrast, was expected to have only inclusionary learning effects, making the course more accessible to 'disadvantaged' students without harming the learning of 'advantaged' students.

The data - collected among 1325 undergraduates who viewed one of four experimental versions of an introductory sociology lecture – confirmed the first and second hypotheses. Students' relevance perceptions boosted their course satisfaction, which in turn stimulated their course achievement. Unexpectedly, however, perceived relevance also slightly decreased students' course achievement directly, which might indicate a negative effect of 'keeping students within their comfort zone' on their course understanding and critical thinking.

Matching students' gender with gendered example content indeed helped them relate to the course, as predicted by the third hypothesis. Furthermore, a mismatch of students' gender with the example content hindered their relevance perceptions, and thus their learning. Still, students' socio-cultural position does not exist in a vacuum, but is embedded in a broader system of power relations. Of crucial importance is Brookfield's (2007) contemporary take on Marcuse's scepticism of attempts to diversify the curriculum. Put briefly, integrating minority perspectives into the classroom alongside mainstream ones may reinforce the status quo, rather than questioning it, because the minority ideas lose their radical character. This is, in Marcuse's (1965) terms, an example of 'repressive tolerance'. He claimed that the only way to avoid

marginalizing dissenting perspectives would be to not associate them with dominant ones, but to expose students solely to alternative views: 'Unless the student learns to think in the opposite direction, he will be inclined to place the facts into the predominant framework of values' (113). For gender, such a 'radical minority' program is difficult to imagine, as masculine students' educational underachievement complicates feminine students' 'minority' status (Watson, Kehler, and Martino 2010). Still, future researchers should consider such power dynamics when testing the learning effects of 'culturally congruent' course contents.

For *medium*-related relevance, by contrast, exclusionary mechanisms did not occur. On the contrary: as posited in hypotheses four to six, the use of YouTube examples – instead of verbal examples - in the introductory sociology course functioned as an 'equalizing' force. Firstly, it rendered insignificant the effects of students' parental cultural status on their perceived course relevance and course achievement, as well as the effect of students' gender on their achievement. Secondly, it transformed the insignificant effect of students' immigrant background on their course satisfaction into a slight positive one. This suggests that teachers can integrate YouTube examples into their courses to boost disadvantaged students' learning without putting others at a disadvantage. Future research should replicate these findings in other sociology courses, as well as test the impact of other 'popular' media than YouTube.

Some more practical limitations are inherent to the study's method. Firstly, to ensure that differences in perceived course relevance could be attributed to the course examples' content and medium, all other course elements were standardized. The obvious downside is that instead of being immersed in a 'normal', face-to-face lecture, students watched a video 'guest lecture'. This should not be too problematic: similar levels of student satisfaction have been found in distant/non-classroom-based and 'traditional' courses, and university courses' heterogeneous format and structure ensures that other course types blend in well (Svanum and Aigner 2011).

A second limitation lies in the experiment's short duration of just one 50-minute lecture. Stronger learning effects might occur if the experiment were to span the whole course. Achievement could then also be measured more generally, by analyzing students' exam results. However, such long-term experiments raise ethical concerns about the use of students' exams as data and the extended exposure of student subgroups to 'suboptimal' teaching techniques.

Finally, three experimental conditions could be added. The first is a 'pure' control condition without examples, to test Frymier and Houser's (1998) claim that all course examples increase relevance. The opposite is also thinkable: perhaps 'wrong' examples first trigger students' attention, after which they are evaluated as irrelevant, leading to a more negative experience. The second additional condition would mix up the example contents, e.g. giving 'masculine' *and* 'feminine' examples. This 'in-between condition' might be generally liked because most students have something to relate to, or generally disliked because half of the examples are less relevant. A final condition would compare this study's 'passive' use of visual examples with an 'active' approach, e.g. by asking students to shoot their own course-related videos. This may stimulate the sociological imagination even more, but also makes the course more challenging, perhaps hindering 'disadvantaged' students' learning (Eisen 2012).

Despite its limitations, the study's unique contribution lies in its successful manipulation of 'course relevance'. To achieve this, one should (1) consider the fit between course and student characteristics, and (2) disentangle content- and medium-related relevance. These nuances matter, and not just because of their indirect impact on student achievement. Perceived relevance also directly affects course satisfaction, which according to previous studies (see Van Auken 2013:210) supports students' self-esteem and social capital, as well as their moral and ethical development. Courses are inevitably - though often subtly - socio-culturally situated. Recognizing this might encourage instructors to teach in a more conscious, self-critical manner.

REFERENCES

Andrist, Lester, Valerie Chepp, Paul Dean, and Michael V. Miller. 2014. "Toward a Video Pedagogy: A Teaching Typology with Learning Goals." *Teaching Sociology* 42(3):196–206.

Aronson, Brittany and Judson Laughter. 2016. "The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas." *Review of Educational Research* 86(1):163–206.

Azzolini, Davide and Carlo Barone. 2013. "Do They Progress or Do They Lag behind? Educational Attainment of Immigrants' Children in Italy." *Research in Social Stratification and Mobility* 31:82–96.

Brint, Steven. 2013. "The 'Collective Mind' at Work: A Decade in the Life of U.S. Sociology of Education." *Sociology of Education* 86(4):273–79.

Brookfield, Stephen. 2007. "Diversifying Curriculum as the Practice of Repressive Tolerance." *Teaching in Higher Education* 12(5–6):557–68.

Choi, Namok. 2005. "Self-Efficacy and Self-Concept as Predictors of College Students' Academic Performance." *Psychology in the Schools* 42(2):197–205.

de Graaf, Paul M. and Matthijs Kalmijn. 2001. "Trends in the Intergenerational Transmission of Cultural and Economic Status." *Acta Sociologica* 44(1):51–66.

Dierckx, Myrte, Joz Motmans, and Petra Meier. 2013. *Attitudemeting M.b.t. Seksisme, Holebifobie En Transfobie - "Beyond the Box."* Brussels.

Eisen, Daniel B. 2012. "Developing a Critical Lens: Using Photography to Teach Sociology and Create Critical Thinkers." *Teaching Sociology* 40(4):349–59.

Finney, Sherry and Joanne Pyke. 2008. "Content Relevance in Case-Study Teaching: The Alumni Connection and Its Effect on Student Motivation." *Journal of Education for Business* 83(5):251–58.

Frymier, Ann B. 2002. “Making Content Relevant to Students.” Pp. 83–92 in *Communication for teachers*, edited by J. L. Chesebro and J. C. McCroskey. Boston, M.A.: Allyn & Bacon.

Frymier, Ann B. and Marian L. Houser. 1998. “Does Making Content Relevant Make a Difference in Learning?” *Communication Research Reports* 15(2):121–29.

Frymier, Ann B. and Gary Shulman. 1995. “‘What’s in It for Me?’: Increasing Content Relevance to Enhance Students’ Motivation.” *Communication Education* 44(1):40–50.

Gay, Geneva. 2013. “Teaching To and Through Cultural Diversity.” *Curriculum Inquiry* 43(1):48–70.

Hayes, Andrew. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.

Howard, Jay and Aimee Zoeller. 2007. “The Role of the Introductory Sociology Course on Students’ Perceptions of Achievement of General Education Goals.” *Teaching Sociology* 35(3):209–22.

Jackman, Mary. 1994. *The Velvet Glove - Paternalism and Conflict in Gender, Class, and Race Relations.* Berkeley: University of California Press.

Jones, Troy and Kristen Cuthrell. 2011. “YouTube: Educational Potentials and Pitfalls.” *Computers in the Schools* 28(1):75–85.

Kraaykamp, Gerbert and Natascha Notten. 2016. “Parental Cultural Socialization and Educational Attainment. Trend Effects of Traditional Cultural Capital and Media Involvement.” *Research in Social Stratification and Mobility* 45:63–71.

Kwenda, Maxwell. 2011. “Factors Affecting Performance in an Introductory Sociology Course.” *College Teaching* 59(2):60–65.

Linnenbrink-Garcia, Lisa et al. 2010. “Measuring Situational Interest in Academic Domains.” *Educational and Psychological Measurement* 70(4):647–71.

Luna, Yvonne M. and Stephanie A. Winters. 2017. "'Why Did You Blend My Learning?' A Comparison of Student Success in Lecture and Blended Learning Introduction to Sociology Courses." *Teaching Sociology* 45(2):116–30.

Marcuse, Herbert. 1965. "Repressive Tolerance." Pp. 81-123 in *A Critique of Pure Tolerance*, edited by R. P. Wolff, B. J. Moore, and H. Marcuse. Boston: Beacon Press.

Mazer, Joseph P., R. E. Murphy, and C. J. Simonds. 2007. "I'll See You On 'Facebook': The Effects of Computer-Mediated Teacher Self-Disclosure on Student Motivation, Affective Learning, and Classroom Climate." *Communication Education* 56(1):1–17.

McKinney, Kathleen and Naghme Naseri. 2011. "A Longitudinal, Descriptive Study of Sociology Majors: The Development of Engagement, the Sociological Imagination, Identity, and Autonomy." *Teaching Sociology* 39(2):150–64.

McLean, Monica and Andrea Abbas. 2009. "The 'biographical Turn' in University Sociology Teaching: A Bernsteinian Analysis." *Teaching in Higher Education* 14(5):529–39.

Muddiman, Ashley and Ann B. Frymier. 2009. "What Is Relevant? Student Perceptions of Relevance Strategies in College Classrooms." *Communication Studies* 60(2):130–46.

Noy, Shiri. 2014. "Secrets and the Sociological Imagination: Using PostSecret.com to Illustrate Sociological Concepts." *Teaching Sociology* 42(3):187–95.

OECD. 2010. *PISA 2009 Results: Overcoming Social Background – Equity in Learning Opportunities and Outcomes*. Retrieved (http://www.oecd.org/pisa/publications/).

Ractham, Peter and Daniel Firpo. 2011. "Using Social Networking Technology to Enhance Learning in Higher Education: A Case Study Using Facebook." Pp. 1–10 in *44th Hawaii International Conference on System Sciences*. New York: IEEE.

Rafalovich, Adam. 2006. "Making Sociology Relevant: The Assignment and Application of Breaching Experiments." *Teaching Sociology* 34(2):156–63.

Svanum, Soren and Carrie Aigner. 2011. “The Influences of Course Effort, Mastery and Performance Goals, Grade Expectancies, and Earned Course Grades on Student Ratings of Course Satisfaction.” *British Journal of Educational Psychology* 81(4):667–79.

Sweet, Stephen. 2016. “How Departments Can Respond to the Changing Popularity of the Sociology Major.” *Teaching Sociology* 44(1):3–16.

Sweet, Stephen and Marissa Cardwell. 2016. “Editor’s Comment: Considering Assessment.” *Teaching Sociology* 44(3):149–50.

Van Auken, Paul. 2013. “Maybe It’s Both of Us: Engagement and Learning.” *Teaching Sociology* 41(2):207–15.

Van Houtte, Mieke and Peter A. J. Stevens. 2009. “School Ethnic Composition and Students’ Integration Outside and Inside Schools in Belgium.” *Sociology of Education* 82(3):217–39.

Wagenaar, Theodore C. 2004. “Is There a Core in Sociology? Results from a Survey.” *Teaching Sociology* 32(1):1–18.

Wartenbergh, Froukje et al. 2009. *Student Monitor Flanders*. Retrieved (http://www.ond.vlaanderen.be/hogeronderwijs/publicaties).

Watson, Anne, Michael Kehler, and Wayne Martino. 2010. “The Problem of Boys’ Literacy Underachievement.” *Journal of Adolescent & Adult Literacy* 53(5):356–61.

Whitley, Cameron T. 2013. “A Picture Is Worth a Thousand Words: Applying Image-Based Learning to Course Design.” *Teaching Sociology* 41(2):188–98.

Wood, Robert E. and Edwin A. Locke. 1987. “The Relation of Self-Efficacy and Grade Goals to Academic Performance.” *Educational and Psychological Measurement* 47(4):1013–24.

Yair, Gad. 2000. “Educational Battlefields in America: The Tug-of-War over Students’ Engagement with Instruction.” *Sociology of Education* 73(4):247–69.

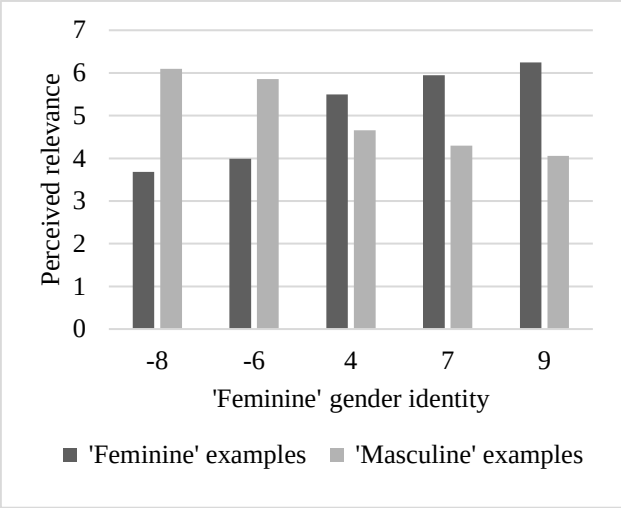
Zipp, John F. 2012. “2011 Hans O. Mauksch Address: Teaching for Whom?” *Teaching Sociology* 40(4):301–11.

Table 1. Moderated serial mediation model: Unstandardized indirect effects of students' gender identity, immigrant background and parental cultural status on course achievement via perceived relevance and course satisfaction

	Perceived relevance			Course satisfaction			Course achievement		
	Corr	**Coeff**	**SE**	**Corr**	**Coeff**	**SE**	**Corr**	**Coeff**	**SE**
Constant	n/a	**5.00*** **	0.12	n/a	**28.53*** **	0.60	n/a	**1.33*** **	0.21
Students' 'feminine' gender identity	.02	**-0.12*** **	0.01	.01	0.00	0.05	0.05	**0.02***	0.01
Students' immigrant background (1=yes)	.02	0.19	0.21	.06*	0.00	0.69	-0.07*	-0.22	0.15
Students' parental cultural status	.00	0.14	0.11	-.04	-0.44	0.37	0.08**	**0.27*** **	0.08
'Feminine' (vs. 'masculine') course examples	-.01	**-0.22°**	0.12	-.02	-0.32	0.40	0.07*	**0.18***	0.08
Visual (vs. verbal) course examples	.04	**0.29***	0.14	.03	-0.08	0.46	-0.03	-0.04	0.10
Perceived relevance	1			.23***	**0.74*** **	0.09	-0.01	**-0.04***	0.02
Course satisfaction	.23***			1			0.25***	**0.06*** **	0.01
Maintained course interest	.05	0.02	0.01	.18***	**0.25*** **	0.04	0.09**	0.01	0.01
Interactions of students' socio-cultural position with the used course examples									
'Feminine' examples x students' 'feminine' gender identity	n/a	**0.26*** **	0.02	n/a	-0.09	0.06	n/a	-0.01	0.01
Visual examples x students' 'feminine' gender identity	n/a	0.01	0.02	n/a	0.06	0.06	n/a	**-0.02°**	0.01
Visual examples x students' immigrant background	n/a	-0.08	0.32	n/a	**2.09***	1.04	n/a	-0.05	0.22
Visual examples x parental cultural status	n/a	**-0.34***	0.17	n/a	-0.09	0.55	n/a	**-0.25***	0.12

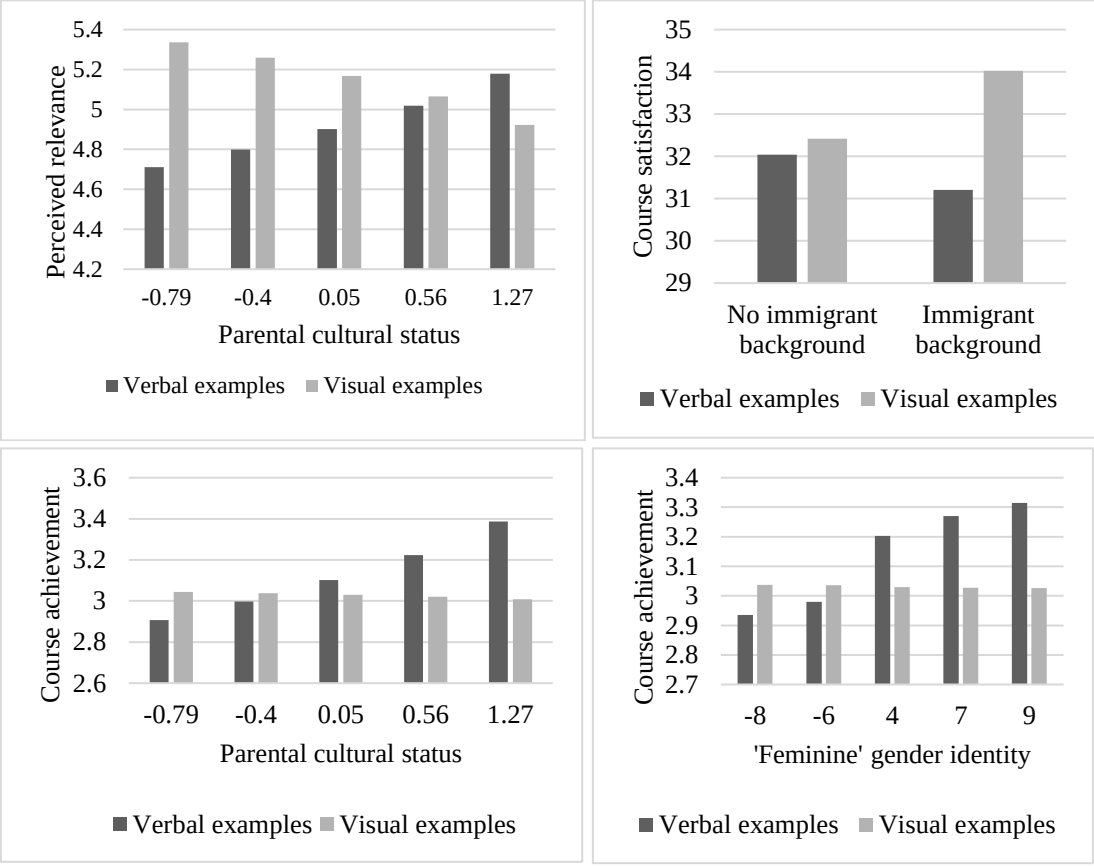
° p < .10; * = p < .05; ** = p < .01; *** = p < .001; Bold effects are significant at p < .10
Corr = Zero-order correlation with dependent variable; Coeff = Slope; SE = standard error

Figure 1.



Note: The values on the X-axis are the 10th, 25th, 50th, 75th and 90th percentiles of 'feminine' gender identity

Figure 2.



Note: For the 'parental cultural status' and ''feminine' gender identity' graphs, the values represented on the X axis are the 10th, 25th, 50th, 75th and 90th percentiles.

List of figure captions

- Figure 1. Effect of students' 'feminine' gender identity on perceived course relevance, dependent on the course examples' gendered contents
- Figure 2. Significant interaction effects of visual course examples with students' (dis)advantaged socio-cultural positions on their perceived course relevance, course satisfaction and course achievement

APPENDIX A. Factor loadings and item means for the second mediator 'Course satisfaction'

Item	Loading	Mean*	SD
Now that you've attended the guest lecture, how well would you say that you can do the following things?			
1. Staying focused during this lecture	.71	2.07	0.86
2. Memorizing the lecture matter and recalling it when necessary (e.g. on an exam)	.66	2.04	0.73
3. Applying the lecture matter to situations in my own life	.47	2.27	0.78
4. Discriminating between important and less important elements of this lecture	.43	2.51	0.78
5. Understanding the lecture matter	.63	2.58	0.75
6. Making notes which emphasize, clarify and relate key facts of the lecture	.56	2.16	0.78
7. Explaining the lecture matter clearly to others	.61	2.01	0.75
Below are another few questions about today's guest lecture, with two adjectives at the ends.			
8. How did you feel today during the viewing of the guest lecture? (uncomfortable - comfortable)	.39	3.11	0.91
9. What kind of atmosphere did the instructor create today during the lecture? (relaxed – tense)	**	1.89	0.82
10. How was the instructor's attitude during this lecture? (loose – tight)	**	1.98	0.75
11. How did the instructor behave when giving examples to clarify the lecture? (serious – with humor)	**	2.00	0.80
12. What did you think of the instructor's teaching method today? (fascinating – boring)	-.63	2.54	0.94
To what extent to you (dis)agree with the following statements?			
13. The sociology lecture was interesting today	.78	2.94	1.00
14. Today's lecture did not really grab my attention	-.70	3.17	1.09
15. This lecture stimulated my interest in durkheim's ideas	.54	2.77	0.95
16. The lecture was so interesting today, that it was easy to keep paying attention	.78	2.43	0.96

* Items 1-7 were measured with a scale of 0 (very hard for me) to 4 (very easy for me) / items 8-12 with a 4-point semantic differential (adjectives at scale ends) / items 13-16 with a scale of 0 (disagree strongly) to 5 (agree strongly)

** These three items were dropped as they did not load on the 'course satisfaction' factor

APPENDIX B. Measurement of the dependent variable 'Course achievement'

1) Jan owns a café. He makes the coffee himself, but also offers his customers delicious cheesecake which he buys from the bakery around the corner. One day, that bakery suddenly decides to stop producing the cheesecake, leaving Jan with disappointed customers. From Durkheim's perspective, one could above all see this situation as:

□ a lack of mechanical solidarity / □ an illustration of a social fact / □ a lack of organic solidarity /□ an illustration of egoism

2) Which of the four phenomena given below would Durkheim not call a 'social fact'?

□ speaking a language / □ stopping when the traffic light goes red / □ celebrating someone's birthday /□ dying

3) Besides transferring knowledge, higher education also brings together young adults of similar ages, which leads to friendships and relationships. This is an example of:

□ a manifest function / □ a latent function /□ a latent dysfunction / □ a manifest dysfunction

4) According to Durkheim, mechanical solidarity above all occurs in societies with a lot of:

□ social facts / □ uniformity / □ division of labor / □ individualism

5) A student stays awake studying until 6 AM on the day before the exam. Why could one call this a 'social fact'? Check what does *not* apply.

□ Because the student consciously chooses to study so intensely / □ Because the student will get bad grades if he/she does not study / □ Because the exam will take place, regardless of whether the student has studied or not / □ Because the student's family cares greatly about him/her getting good grades

6) Several thousand fans sing along with their band during a concert. This illustrates the idea of:

□ organic solidarity / □ a latent dysfunction of the concert / □ mechanical solidarity / □ a manifest dysfunction of the concert